Each year beginning in 1993, as a requirement of NRS 444.587, the Nevada Division of Environmental Protection submits a report to the legislature on the status of markets for recyclables in Nevada.

NRS 444.587 mandates the Department of Conservation and Natural Resources to:

- * develop markets for products made from recycled materials;
- * determine the feasibility for the development of markets outside the state for products made with recycled materials;
- * provide producers of recycled materials with information relating to product manufacturers.

The statute also mandates the Division to submit an annual report to the director of the legislative counsel bureau. The report must:

- * include a general description of markets for recycled materials in the state;
- * any recommendations relating to increasing the demand for recycled materials and developing markets for recycled materials;
- * the development of local and state policies which encourage the purchasing of products manufactured from recycled materials; and
- * financial assistance and incentives to encourage the use of recycled materials in the state.

It should be recognized that the Division cannot directly create markets for recyclable materials. At best, the Division can

encourage private industry to create such markets, provide information to businesses interested in doing so, and recommend policy changes that would encourage market development.

Summary of Recommendations:

- establish a staff position that has recycling market development responsibilities within the Commission of Economic Development
- establish "Buy Recycled" policies that require state and local agencies to purchase recycled content products
- provide incentives for businesses to use recycled feedstock in their manufacturing process eg, provide low interest loans, grants, and other funds; provide tax incentives for businesses that use recycled materials as feedstock
- increase education and outreach at local and state levels on the importance of recycling, reuse and waste reduction.

2000 Recycling Market Development Report

Toward that end, each of the past seven legislative reports have contained similar recommendations and information with few variations.

The recommendations remain largely the same in this report. The 2000 report includes a summary of previous recommendations, as well as background information supporting those recommendations.

Recommendation #1

Establish a staff position in NCED with recycling market development duties to assess, analyze, evaluate and make recommendations to improve the status of recycling markets in Nevada.

Market Development Staff

Each of the previous legislative reports have recommended that Nevada provide coordinated recycling market development activities in one of the economic development agencies.

Alabama, Arizona, Maryland, Minnesota, New Hampshire, New York, Texas, Utah, Washington, and Wisconsin have full time staff working on recycling market development in an economic development agency. Several other states have a full-time market development position in environmental protection agencies. In each of these other states, the market development duties are assigned separately from the recycling coordinator duties. This is not the case in Nevada.

Nevada has two full-time recycling staff (one Program Assistant II and one Environmental Scientist III) dedicated to promoting all aspects of recycling, including composting, recycling measurement, market development, responding to requests and providing public information, promoting household hazardous waste, writing legislative reports, providing technical assistance, encouraging "buy recycled" policies, and more. Because of the breadth of duties, it is a challenge for recycling staff to focus in depth on any one particular aspect of recycling. In addition, market development is an area that requires specialized experience not typically found among environmental staff.

The Commission on Economic Development (NCED) expressed some interest in recycling in 1995 and 1996. Using NDEP grant funds as a match, NCED applied for, and was awarded, grant funding from the US Environmental

Protection Agency. With EPA funding, NCED was able to develop a one-year contract for a Recycling Economic Development Advocate



(REDA). The focus of work performed by the REDA was to build markets for secondary materials in Nevada through business attraction activities and, consequently, develop jobs in the recycling industry. When EPA funding was exhausted, the Division of Environmental Protection developed a one-year contract with the Commission on Economic Development to continue the work of the REDA in Nevada. Unfortunately, the effort put forth by the REDA contractor was, for the most part, unsuccessful in contributing to development of any new markets for recyclable material.

Although NCED is better suited to develop recycling markets, the legislative mandate for this function remains with NDEP. This mandate should be shifted to NCED, and the resources for a new position should be allocated to carry it out. Under the present arrangement, NCED does not intend to participate in recycling market development. NDEP is currently addressing the issue by seeking to directly engage an independent contractor with appropriate qualifications.

Recommendation #2:

The State should require that state and local agencies adopt environmentally preferable purchasing policies.

Recycled Content Product Procurement

In order for recycling to be successful, all the components of recycling must be in place. Recycling is far more than simply collecting materials at curbside. The collected materials must be transported, processed, transported again, remanufactured, transported, and then purchased by consumers. Of course, the status of recycling in Nevada could improve if local manufacturers used locally collected recycled materials in their manufacturing process. Yet, an equally important component of the recycling loop is the "buy recycled" component. Once the recyclables are collected, processed and remanufactured, it's up to consumers (including federal, state and local governments) to purchase products containing recycled material. Supporting "buy recycled" efforts and creating "buy recycled" policies will help create a demand for recycled content products.

Large purchasing agencies (state and local governments) can help create the demand for these recycled-content products. Current Nevada law allows agencies to purchase products made from recycled materials and even pay a 5% purchase preference (10% if manufactured in Nevada) for those products (see NRS. 332.065, NRS 333.4606 and NRS 333.4609.) This purchase preference allows agencies to spend more money to purchase products with recycled content; however, with limited budgets, there is little incentive for agencies to spend extra money.

Furthermore, according to the National Recycling Coalition's "Buy Recycled Business Alliance," purchase preferences alone do not increase the purchase of recycled content products.

Agencies reporting to the federal government are required to use recycled content paper for their reports. This is the only requirement of agencies to purchase recycled paper. State and local agencies in Nevada are not *required* to purchase any other types of recycled content products. A clear policy that requires purchase of recycled content products is needed.

Federal Government as a Leader

Recognizing the importance of supporting recycling and the need to demonstrate leadership by example, the federal government developed an environmentally preferable purchasing program. This program, known as EPP, was developed in response to Federal Executive Order 13101, signed by President Clinton in 1998. The Executive Order, "Greening the Government through Waste Prevention, Recycling, and Federal Acquisition", calls for each agency head to incorporate waste prevention and recycling into the agency's daily operations and work to increase and expand markets for recovered materials by increasing government preference and demand for those products. The EPP helps use government purchasing power to stimulate the use of recovered materials in the manufacture of

new products and expand markets for those recovered materials. EPA designates items that are or can be made with recovered materials and provides recommendations for the procurement of those items. EPA is making new recommendations to include the following items effective January 1, 2001: carpet cushion; railroad grade crossing surfaces; park benches and picnic tables; playground equipment; food waste compost; plastic lumber landscaping timbers and posts; solid plastic binders; plastic clipboards; plastic file folders; plastic clip portfolios; plastic presentation folders; sorbents (i.e., absorbents and adsorbents); awards and plaques; industrial drums; mats; signage; and manual-grade strapping.

Local Government Models

The Incline Village General Improvement District (IVGID) was the first in the state to adopt an official "buy recycled" policy in 1997. IVGID purchases retread tires, recycled paper, recycled content insulation, cement that contains ash, and more.

Washoe County is a leader in recycling in Nevada. In 1998, Washoe County adopted a buy recycled policy, and in January 2000 hired the first County Recycling Coordinator in Nevada. This progressive attitude is reflected in Washoe County's 1998 recycling rate, the highest in the state at 21%.

Washoe County joined EPA's Waste Wise program, and, in October 1999, the County

was recognized by the US Environmental Protection Agency as a WasteWise Partner of the Year. The County received a Waste Wise Award for its exceptional waste prevention programs and for demonstrating excellence and innovation in recycling. By implementing recycling programs Washoe County saved more than \$500,000 and sent 86,400 fewer pounds to Lockwood landfill.

The following are examples of some of the things Washoe County has done to reduce waste, encourage recycling and save tax payer dollars:

- using carpet squares rather than rolls of carpet. The long term costs are less because damaged and worn carpets can be replaced much cheaper than buying new carpet.
- using retread tires. The county recaps old school bus tires for use on county trucks.
- using re-refined oil. For the past five years, Evergreen Oil Company has sold the county rerefined oil and, in turn, buys back the used oil.
- all bids submitted to the county must be on recycled paper and all bids must include returning of the pallets.

The University of Nevada Las Vegas has a "buy recycled" policy for recycled toner cartridges and some office paper. UNLV purchasing officials estimate they save \$30,000 per year with this program. The vendor replaces spent cartridges with remanufactured cartridges and buys the old ones. The funds from the spent cartridges are split between UNLV's purchasing program and the Rebel Recycling program.

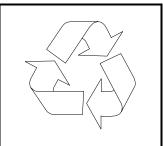
Recycled content paper is purchased from Boise-Cascade. There are several federal programs on the UNLV campus, and, as mentioned earlier, federal programs are required to use recycled content paper. At one time, UNLV purchased recycled content paper from the Nevada State Purchasing

> Division. It had to discontinue this program, however, because the paper from State Purchasing was too expensive.

> In addition to large government agencies, many large companies are adopting environmentally preferable purchasing policies, as well. McDonalds

Corporation, Patagonia, Inc. and JC Penney are examples of successful companies demonstrating how businesses can operate with a profit, reduce waste and minimize their impact on the environment.

In November 1999, NDEP offered a satellite downlink workshop called "Buying Recycled: The Real Story About Cost,



Availability, and Quality." This session, sponsored by US EPA, offered examples of agencies and organizations all over the United States that have revised their purchasing specifications to include a preference for recycled content products.

The presenters in the satellite downlink expressed that the biggest challenge in encouraging the purchase and use of recycled products is convincing the procurement officials themselves. Each presenter expressed the need to educate the procurement officials on the quality and availability of recycled content products, and how to go about obtaining and testing recycled content products.

Additionally, there must be an incentive for purchasing officials, at all levels, to seek out recycled content products. Establishing a "buy recycled" or "environmentally preferable purchasing" policy would provide this incentive.

Recommendation #3

Develop incentives for businesses using locally recycled materials in their manufacturing process.

Providing incentives for businesses to use locally recycled materials as feedstock is one way to build the infrastructure that will encourage recycling, reuse and waste reduction.

As reported in the 1998 Recycling Market Development report, "In trying to recruit recycling and re-manufacturing businesses (or assist local companies to expand) NCED found that the most frequently asked questions were:

- 1) What types of financial assistance does Nevada provide? (with an emphasis on grants)
- 2) are there tax incentives for recycling businesses?
- 3) what is the state's commitment to purchasing recycled content products?
- 4) what is the supply of secondary material?"¹

Answers to these questions are as follows:

- 1) Although grant/contract funds are available from NDEP to encourage recycling, reuse and waste reduction, these funds are available only to government agencies, the University and Community College System of Nevada, and nonprofit organizations. Available funds are not sufficient to support a financial assistance program for recycling businesses.
 - 2) The Commission on Economic

Provide Incentives for Businesses

¹ 1998 Recycling Market Development Report, p 21.

Development administers business assistance programs in Nevada. There is a tax abatement program through NCED. One provision allows property tax abatements for recycled-content product manufacturing businesses, but only if the real property investment is \$50 million or more, and the personal property investment is \$15 million or more. There are no loans, grants or tax incentives that are available specifically to encourage recycling businesses.

- 3) As previously mentioned, Nevada has no policy or mandate for state and local agencies to buy recycled content products.
- 4) The potential supply of secondary materials is unknown. What is known is the tonnage of materials collected for recycling and reported to the state. Every year Nevada municipalities report on the quantities of recyclable materials recovered and report this information to the NDEP per NAC 444A.135. NDEP Recycling staff compile the information and calculate the annual recycling rate for the state (see Attachment A, 1998 Recycling Rate report).

The NDEP typically calculates two rates, one with construction & demolition debris, the other without it. The 1998 municipal state recycling rate was 12%. The recycling rate with construction & demolition debris added was 22%. Neither the state as a whole nor any of the 17 counties in Nevada have achieved the 25% recycling rate goal set by the legislature in 1991. Individual

county recycling rate information for 1998 is listed below. The rates listed are without construction & demoliltion debris added.

1998 County Recycling Rates

Carson City	16%
Clark County	11%
Douglas County	12%
Elko County	1%
Humboldt County	2%
Washoe County	21%

Nevada Businesses Using Locally Recycled Materials

There is only a handful of businesses using recycled materials in their manufacturing processes; even fewer use locally recycled materials.

Full Circle Compost

This former dairy operation, located in Carson Valley, switched to a composting operation in 1999. Full Circle Compost accepts yard waste, wood waste, manure, and other organic material (no food) from local businesses and residents. The organic material is composted and sold back to the public as a soil amendment.

Bently Agrowdynamics

This operation, also located in Carson Valley, composts wood waste, yard waste, and other organic materials, including biosolids (sewage sludge). The biosolids



compost is produced for use on Bently property to grow alfalfa, however, other compost is sold to the public. Bently Agrowdynamics expects to begin bagging compost for resale in the near future.

Trex Company

This company, located in Fernley, manufactures plastic lumber products. Plastic shrinkwrap and sawdust are used in its manufacturing processes. Although the company does purchase some recycled material locally, most of its feedstock is purchased outside Nevada.

Recommendation #4

Increase education and outreach at local and state levels on the importance of recycling, reuse and waste reduction. Establish a new public information officer position within NDEP.

Education & Information

NDEP provides recycling information to the public by having a presence at Earth Day

events around the state, through the Nevada Recycling Hotline, and by occasionally speaking at seminars and workshops. The Nevada Recycling Hotline is a toll-free telephone number that allows people in Nevada to call and find out where they can take their recyclables if they don't have curbside recycling. The Nevada Recycling Hotline is answered by an NDEP recycling staff person so other recycling related information is available as well, such as information about environmental events, Earth Day celebrations, household hazardous waste disposal, and recycling statutes and regulations.

During the first nine months of 1999, over 1,100 calls were placed to the Nevada Recycling Hotline. Most of the callers are people living in apartments in the Las Vegas area. Because they don't have curbside recycling available to them, these callers ask where they can drop off their recyclables.

NDEP recycling staff participate in Earth Day celebrations every year. In 1999 Earth Day celebrations were held in Reno, Carson City, and Las Vegas. At each fair, NDEP recycling staff promoted recycled content products and distributed recycling hotline magnets to the public.

Each year the NDEP Recycling Program provides funding in the form of contracts to nonprofit organizations, municipalities, and the University and Community College

System of Nevada. With the exception of the municipalities, funding is provided on a competitive basis. Contract funds are used to promote waste reduction, reuse and recycling throughout the state. Many of the projects funded include educational programs or those that increase recycling opportunities to residents. See "Attachment B" for a list of funding recipients and their projects during the past two funding cycles.

NDEP staff hope to offer recycling training workshops to state and local agencies. This training would cover office recycling, waste reduction, recycled content product procurement and more.

The development of recycling markets depends significantly on public awareness, and the supply of recyclable materials is highly dependant on public participation in recycling programs. A vigorous public information program is needed to support these endeavors, and the Division recommends a new public information officer position to do this.

Future Efforts in Recycling Market Development

NDEP will continue to collect and dispense information which may be valuable to developing recycling markets. The Division will also continue to investigate and report on recycling markets, impediments to market development and policy changes which could promote recycling markets. Given the

difficulties encountered in previous efforts at recycling market development, an objective evaluation of the feasibility of such a program is in order. Lacking the resources to do this itself, the Division is currently seeking to engage a qualified contractor. Objectives of the contract will include:

- to research and report on the status of recycling markets in Nevada, and issues affecting the further development of these markets; and
- based on the findings of the above report, identify realistic market development goals and develop strategies to meet them. The strategies will include actions which can be taken both by the legislature and at the administrative level by NDEP or other agencies.

Summary

Previous efforts by NDEP, NCED and its contractors have had no appreciable success in developing recycling markets. Why is this? The Division's current contract proposal is intended, in part, to answer this question. But some general comments can be given now. Nevada is a desert state with only two, widely separated urban centers, and these are based on a tourism economy. Nevada lacks water, cheap power and other resources that often drive industrial siting decisions. It also lacks the heavy industry

and manufacturing that might use recycled materials. Partly due to its desert setting, landfill space is relatively cheap and abundant in Nevada, and recycling markets have trouble competing with disposal markets for the same materials. It should be noted also that even in states which are favorably situated for recycling markets, and which have aggressive market development programs, success in this endeavor has been the exception rather than the rule.

As stated earlier, the Division cannot directly create markets. It can, by virtue of technical expertise and information gathering ability, perform certain auxiliary market developent functions. These include:

- to maintain waste management and recycling issues within the public view through public information and education;
- to provide information useful to private businesses which may develop markets for secondary materials; and
- to recommend to the legislature, based on sound research, policy changes, that would encourage recycling market development.

The four recommendations in this report represent policy changes intended to promote recycling market development.

Summary of Recommendations:

- establish a staff position in NCED with recycling market development responsibilities
- establish "Buy Recycled"
 policies that require state and
 local agencies to purchase
 recycled content products
- provide incentives for businesses to use recycled feedstock in their manufacturing process eg, provide low interest loans, grants, and other funds; provide tax incentives for businesses that use recycled materials as feedstock
- increase education and outreach at local and state levels on the importance of recycling, reuse and waste reduction.